number of columns in a report exceeds the width of the page, the columns will be wrapped to a second page.

Statistical graphs are documents that display attribute data in the form of a bar chart, line graph, or scatter diagram. Users will be able to create these graphs in black and white to make them suitable for photocopying, or use a variety of colors for display or plotting. The exact number of colors will be limited only by the user's hardware configuration.

Maps are documents that display one or more data layers plus supporting information such as a title, scale bar, north arrow, and legend. When producing maps, users will be able to choose from any number and combination of data layers. For example, the user may choose to display land use/land cover, roads, and streams on one map. Users will also be able to display only those features that meet certain criteria. For example, the user may elect to display only those land use areas that fall into the category of "forest". In either case, users will be able to produce maps in color or black and white (to make them suitable for non-color reproduction). Users will be able to produce map displays with a multitude of colors. The number of colors available will depend on the user's display hardware. Hardcopy plots of those maps will be limited only by the pen colors available for the plotters at CGIA. Some 50 different patterns will be available to users for shading polygon data to produce either color or black and white maps. A variety of map sizes and map scales will be supported.

3.3 System Security

To protect the system from unauthorized access and to support system management needs, a password system will be implemented to grant users access to the system. Each user will be assigned a level of access rights to the various databases, personal workspaces, and software capabilities in the system. Access restrictions or limitations will be defined for each data layer, including cartographic and attribute data.